SONY

Stereo Amplifier

Operating Instructions page 2

Before operating the unit, please read this manual thoroughly and retain it for future reference.

Mode d'emploi page 14

Avant la mise en service de cet appareil, prière de lire attentivement ce mode d'emploi que l'on conservera pour toute référence ultérieure.

Manual de instrucciones página 26

Antes de utilizar la unidad, lea este manual detenidamente y consérvelo para futuras referencias.



WARNING WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

NOTICE FOR THE CUSTOMERS IN THE UNITED KINGDOM

The mains lead plug of this apparatus is a 2-pin type designed to be connected only to other apparatus equipped with a suitable socket outlet.

If the plug cannot be used in this way, cut off the plug and fit an appropriate one as follows:

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond to the coloured markings identifying the terminals in your plug, proceed as follows: The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

WARNING

To prevent shock hazard, do not insert the plug cut off from the mains lead into a socket outlet. This plug cannot be used and should be discarded.

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Overview

- Power output is 80 W + 80 W (at 6 ohms).
- OPTICAL DIGITAL IN connectors for DAT (Digital Audio Tape) deck and CD player are provided for listening to a digital sound source.
- Tape-to-tape recording can be performed using the REC OUT SELECTOR and the INPUT SELECTOR.

Precautions

On operating voltage

Before operating the unit, check that the operating voltage of your unit is identical with the voltage of your local power supply.

Where purchased	Operating voltage
United Kingdom	240 V AC
Continental European countries	220 V AC

On safety

- The unit is not disconnected from the AC power source as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- Unplug the unit from the wall outlet if it is not to be used for an extended period of time. To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- Should any solid object or liquid fall into the unit, unplug the unit and have the unit checked by qualified personnel before operating it any further.

On cleaning the cabinet

Clean the cabinet, panels and controls with a soft cloth lightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

On repacking

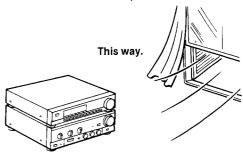
Do not throw away the carton and the packing material. This makes an ideal container when transporting the unit. When shipping the unit, repack it as it was packed at the factory.

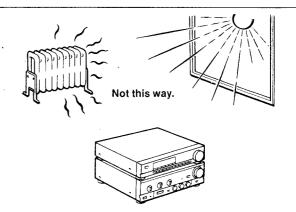
If you have any question or problem concerning your unit, please consult your nearest Sony dealer.

Installation

Notes on Installation

Place the unit in a location with adequate air circulation to prevent internal heat build-up in the unit.





Do not place anything on top of the unit. The ventilation holes must be unobstructed for proper operation of the unit and to prolong the life of its components.



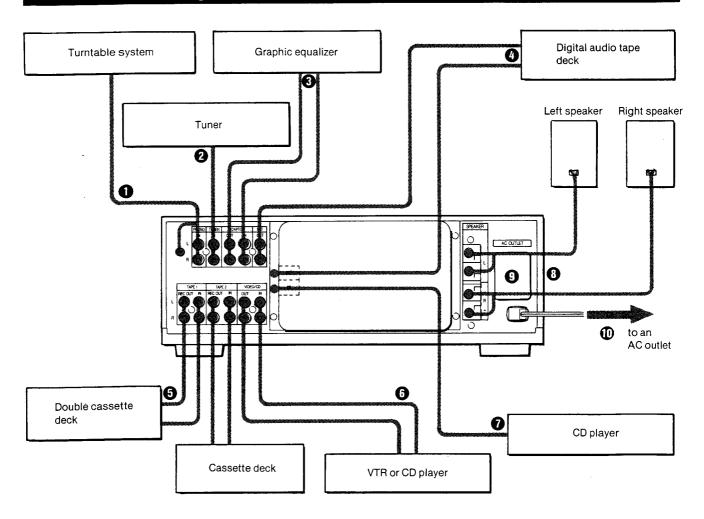
Not this way.

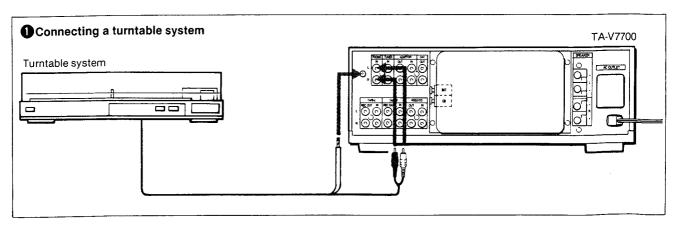
Connecting the System

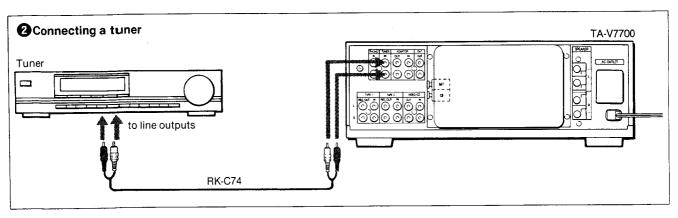
Notes on Connection

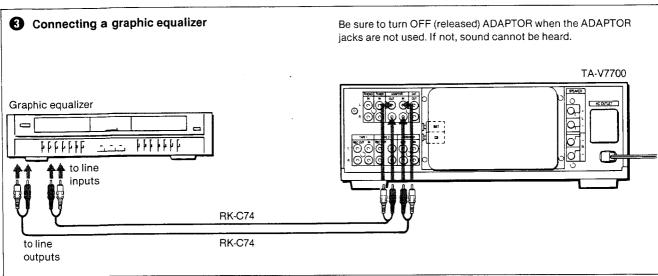
- Connect the AC power cord last. Make sure power is off.
- Cord plugs and jacks are color coded. Red plugs and jacks are for right channel (R) and white ones for left channel (L).
- Fully insert cable connectors into jacks. Loose connections may cause hum or noise.

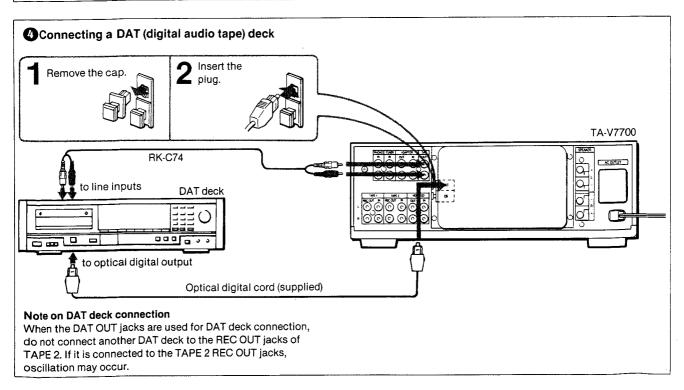
Overall Connection Diagram



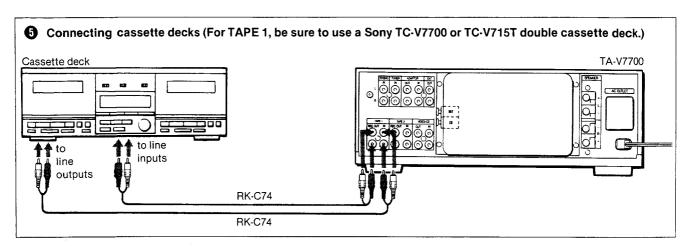


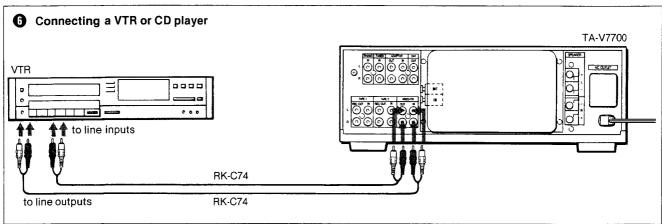


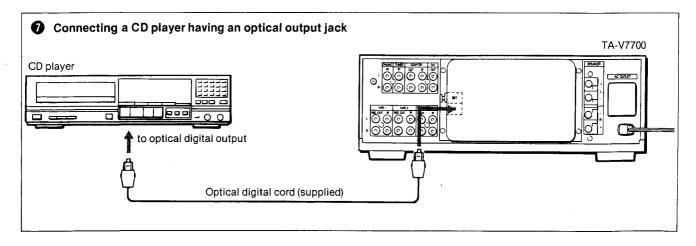


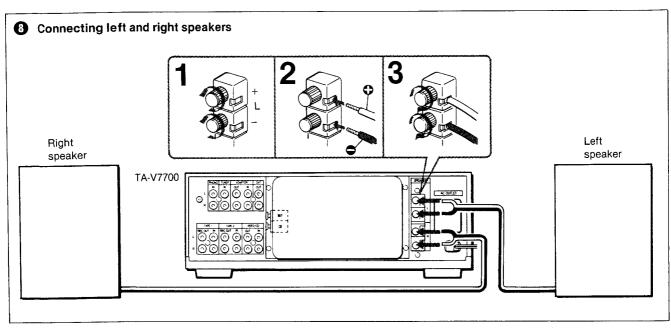


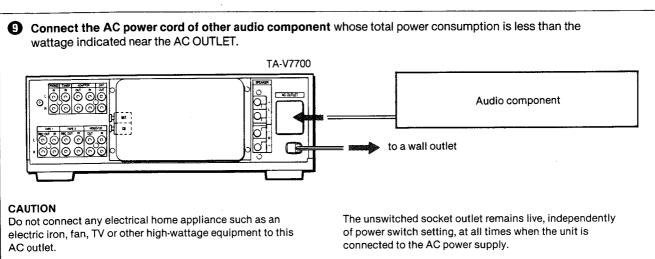
Connecting the System

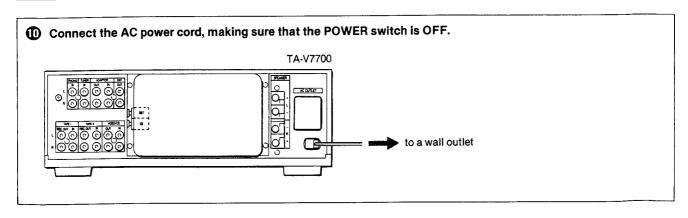






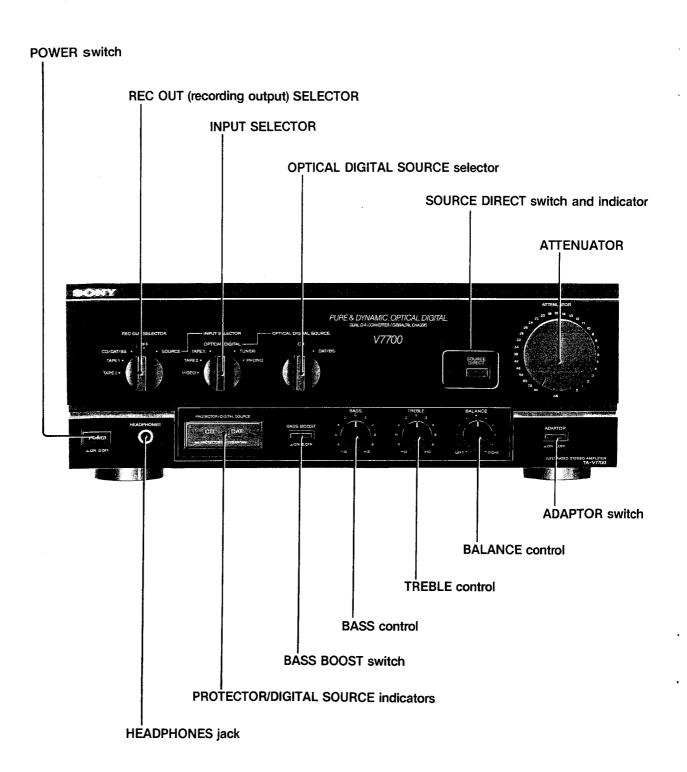






Parts Identification

Refer to the pages indicated in • for details.



Audio Adjustment

Volume Adjustment

To adjust volume

Turn ATTENUATOR clockwise to increase volume. Turn it counterclockwise to decrease volume.

Before turning ON the power, turn ATTENUATOR fully counterclockwise (∞ dB) to avoid damage to the speakers.

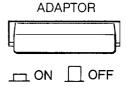


To Listen to the Sound through the Connected Graphic Equalizer

Depress ADAPTOR.

Be sure to turn OFF (released) ADAPTOR when the ADAPTOR jacks are not used. If not, sound cannot be heard.

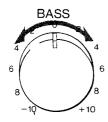
When a graphic equalizer is connected Turn ON the ADAPTOR switch.

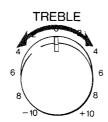


Sound Quality Adjustment

To adjust the tone quality

Turn TREBLE clockwise to increase treble sound. Turn BASS clockwise to increase bass sound.

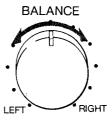




Balance Adjustment

To change the relative strength of the left and right speaker output

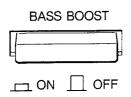
Adjust BALANCE to correct stereo imaging, when the speaker position is not symmetrical.



To increase bass sound

Depress BASS BOOST.

Normally, set the switch to OFF (released).



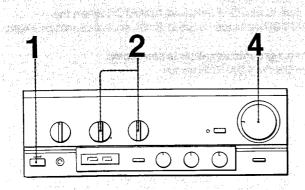
To listen to the sound input to the unit without passing through the circuits of tone controls

Depress SOURCE DIRECT. The indicator lights up and the circuits of BASS BOOST, BASS, TREBLE and BALANCE controls are disengaged.

To use the TREBLE and BASS controls, BASS BOOST switch and the connected graphic equalizer simultaneously

Turn the controls slowly from the standard position by confirming the sound effect. If not, sound may be distorted.

Listening to an Audio Program Source



- 1 Turn on POWER and the connected components.
- 2 Set INPUT SELECTOR and OPTICAL DIGITAL SOURCE to your desired position.

Desired sound source	INPUT SELECTOR	OPTICAL DIGITAL SOURCE selector
CD program or audio signal of VTR	VIDEO/CD	
Taped program connected to TAPE 1 inputs	TAPE 1	_
Taped program connected to TAPE 2 inputs	TAPE 2	_
CD program connected to OPTICAL DIGITAL IN (CD) connector	OPTICAL DIGITAL	CD
Digital audio taped program connected to OPTICAL DIGITAL IN (DAT) connector	OPTICAL DIGITAL	DAT
Radio program	TUNER	_
Record program	PHONO	

- 3 Play the program source.
- 4 Adjust the sound level with ATTENUATOR.

When you turn on the power

The PROTECTOR indicator lights up for approx. five seconds immediately after the power turns on and goes out.

The PROTECTOR indicator also lights up when the condition is abnormal.

When a CD player and/or DAT deck are connected to the OPTICAL DIGITAL IN connectors

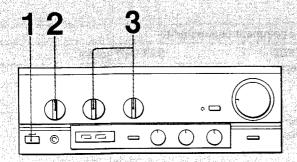
The "CD" and "DAT" DIGITAL SOURCE and OPERATING indicators light up without regard to the setting of the INPUT SELECTOR while power of the connected CD player and DAT deck is on.

For private listening

Connect headphones to the HEADPHONES jack. Speaker sound is automatically disconnected.

Recording

Recording can be made while listening to the sound.



- 1 Turn on POWER and the connected components.
- 2 Set REC OUT SELECTOR to SOURCE.
- 3 Set INPUT SELECTOR and OPTICAL DIGITAL SOURCE to the proper position.

Audio program source to be recorded	INPUT SELECTOR	OPTICAL DIGITAL SOURCE selector
CD program or audio signal of VTR	VIDEO/CD	
Taped program connected to TAPE 1 inputs	TAPE 1	_
Taped program connected to TAPE 2 inputs	TAPE 2	_
CD program connected to OPTICAL DIGITAL IN (CD) connector	OPTICAL DIGITAL	CD
Digital audio taped program connected to OPTICAL DIGITAL IN (DAT) connector	OPTICAL DIGITAL	DAT
Radio program	TUNER	_
Record program	PHONO	_

- 4 Play the program source to be recorded.
- 5 Set the connected cassette deck and/or VTR in the record mode.

To record source sound on DAT deck
Be sure to set OPTICAL DIGITAL SOURCE to CD.

Tape-to-Tape Recording

Recording while listening to another program sound selected by the INPUT SELECTOR can be made. The unit allows tape dubbing between the connected cassette decks and VTR. See the following chart.

Setting of REC		Recording on the equipment connected to			
OUT SELECTOR	TAPE 1	TAPE 2 REC OUT jacks	VIDEO/CD OUT jacks	DAT OUT jacks	
	REC OUT jacks (Recording signal is output.)			OPTICAL DIGITAL SOURCE selector: CD position	
TAPE 1 (Sony TC-V7700 or TC-V715T double cassette deck only)	Recording is possible.	Recording is possible.	Recording is possible.	Recording is possible.	Signal is not output though REC OUT of DAT.
TAPE 2	Recording is possible.	Signal is not output.	Recording is possible.		
CD/DAT	Recording is possible.	Recording is possible.	Recording is possible.		

Troubleshooting Guide

Before going through the check list below, first refer back to the connection and operating procedures. Should any problem persist after you have made these checks, consult your nearest Sony dealer.

Trouble	Cause	Remedy
No audio	Faulty setting of INPUT SELECTOR. Faulty connection	Set it correctly.Connect the unit and other equipments correctly.
	• The ADAPTOR switch is set to ON when the ADAPTOR jacks are not used.	Turn OFF the ADAPTOR switch.
	• The equipment connected to the ADAPTOR jacks is not turned on.	• Set the ADAPTOR switch to ON or turn on the equipment.
No audio from one channel or unbalanced left and right sound level.	Incorrect setting of the BALANCE control.	Set the BALANCE correctly.
No recording	The REC OUT SELECTOR is not correctly set.	Set the selector correctly.
Lack of bass sound or obscure instrument position	Mal-setting of sound quality controls	Adjust the controls for sound quality.
Severe hum or noise	Noise from TV, etc.	Keep the connecting cords away from transformers or motors, TV and fluorescent lights.
	Faulty connection of turntable system	Connect correctly. Ground the turntable system.

Specifications

Continuous RMS power (both channels driven)

80 W + 80 W (6 ohms) at 1 kHz

70 W + 70 W (6 ohms) at 40 Hz - 20 kHz

Music power output 300 W

Harmonic distortion Less than 0.02% at rated output

IM distortion (60 Hz: 7 kHz = 4:1)

Less than 0.02% at rated output

Frequency response

PHONO: RIAA equalization curve

±0.5 dB

TUNER

TAPE 1, 2 VIDEO/CD

10 Hz - 50 kHz + 0 dB

ADAPTOR

Residual noise Less than 130 µV (6 ohms network A)

Input

mpu.				
Input	Sensitivity	Impedance	S/N (network, input level)	
PHONO	2.0 mV	50 kohms	70 dB (A, 2.0 mV)	
TUNER TAPE 1, 2 VIDEO/CD ADAPTOR	150 mV	50 kohms	91 dB (A, 150 mV)	

DA converter

Frequency

 $4 Hz - 20 kHz_{-0.5}^{+0} dB$ More than 95 dB

Outputs

Output	Туре	Voltage	Impedance
DAT OUT ADAPTOR TAPE 1, 2 VIDEO	Phono	150 mV	1 kohms
HEAD- PHONES	Stereo phone	Accepts headphones of 8 ohms or more.	

Tone controls

BASS ±10 dB (at 100 Hz)
TREBLE ±10 dB (at 10 kHz)
BASS BOOST +10 dB (at 20 Hz, 1 W)

General

Power requirements

Model for continental European countries:

220 V AC, 50/60 Hz

Model for United Kingdom: 240 V AC, 50/60 Hz

Power consumption

Model for continental European countries: 150 W

Model for United Kingdom: 350 W

 $\begin{array}{lll} \text{AC outlet} & \text{1 Unswitched, 200 W max.} \\ \text{Dimensions} & \text{Approx. 355} \times \text{130} \times \text{368 mm (w/h/d)} \\ \text{Weight} & \text{Approx. 10.2 kg (22 lb 8 oz), net} \\ \end{array}$

Design and specifications subject to change without notice.